

<b>Notice of Allowability</b>	Application No.	Applicant(s)	
	10/761,588	LIM ET AL.	
	Examiner	Art Unit	
	Scott Sun	2182	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment by applicant filed 3/9/2006.
2. ☒ The allowed claim(s) is/are 1-3, 5-11.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

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|---|---|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____.</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____.</li> </ol> |
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## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Steven Laut on 3/5/2006.

2. The application has been amended as follows:

Replace claim 1 with: "A mobile terminal having a switching function, comprising: a dual interface means connected to an external device through a communication line, configured to multi-switch data according to a microcontroller unit (MCU) selection signal and a digital signal processor (DSP) selection signal;

an image processing means configured to obtain external image data, digitalize the image data and output the digitalized data to the dual interface means;

a signal processing means configured to activate the MCU selection signal or the DSP selection signal, send the data to the external device through the dual interface means, receive the data from the external device through the dual interface means and processing the data; and

a memory means configured to store or output the data according to control of the image processing means or the signal processing means,

wherein the dual interface means includes:

a connector connected to the external device through the communication line, configured to provide an interface;

a first dual single pole single throw (SPST) connected to a first USB line of the communication line through the connector, configured to provide a data path to the signal processing means when the MCU selection signal is activated and provide a data path to the image processing means when the DSP selection signal is activated,

a second dual SPST connected to a second USB line of the communication line through the connector, configured to provide a data path to the signal processing means when the MCU selection signal is activated and provide a data path to the image processing means when the DSP selection signal is activated.”

3. The reasons for the above amendments were discussed during the telephone interview and are summarized below:

a. All functions preceded with “for” have been replaced with “configured to” to clearly state these functions as limitations and not merely intended use.

b. “Wherein the image processing means includes” has been corrected to “wherein the *dual interface* means includes” to properly correlate with claim 4 (previously presented, now cancelled) and the disclosure of the invention.

4. Having amended the claim(s) as above, claims 1-11 are allowed.

The following is an examiner’s statement of reasons for allowance: prior art does not teach or suggest, either alone or in combination, the limitation “a dual interface

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means including a connector connected to the external device through the communication line, configured to provide an interface; a first dual single pole single throw (SPST) connected to a first USB line of the communication line through the connector, configured to provide a data path to the signal processing means when the MCU selection signal is activated and provide a data path to the image processing means when the DSP selection signal is activated, a second dual SPST connected to a second USB line of the communication line through the connector, configured to provide a data path to the signal processing means when the MCU selection signal is activated and provide a data path to the image processing means when the DSP selection signal is activated" in combination with other limitations of claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Sun whose telephone number is (571) 272-2675. The examiner can normally be reached on M-F, 10:30am-7pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim N. Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SS  
4/6/2006



KIM HUYNH  
SUPERVISORY PATENT EXAMINER

4/7/06